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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,315	01/21/2004	Keld Lange	Q79431	3233

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EXAMINER	
KHAN, IBRAHIM A	
ART UNIT	**PAPER NUMBER**
2617	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/760,315	LANGE, KELD	
	Examiner	Art Unit	
	Ibrahim A. Khan	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement submitted on 01/21/2004 has been considered by the Examiner and made of record in the application file.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1-10 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Blanke (US 20020141512)** in view of **Andersson et al (US 6400966).**

Consider **claim 1**, discloses a mobile communication base station apparatus comprising a plurality of radio transmission and/or reception sections and a plurality of baseband processing sections comprising a user data stream interface (*see abstract and figure 1*), the plurality of baseband processing sections being arranged in a first stage comprising baseband processing sections connected to radio transmission and/or reception sections (*see figure 2, page 1 paragraph 0010, page 2 paragraph 0013*), each radio transmission and/or reception section being connected to at least one baseband processing section (*page 2 paragraph 0013*), wherein

the plurality of baseband processing sections is divided into stages, arranged in said first stage and further stages (*see figure 2, page 1 paragraph 0010, page 2 paragraph 0013* where Blanke discloses baseband processing section that are further connected to other baseband processing sections)

each stage comprising at least one baseband processing section of said plurality of baseband processing sections(*see figure 2, page 1 paragraph 0010, page 2 paragraph 0013* and 0014where Blanke baseband processing section that are further connected to other baseband processing sections)

, and

each baseband processing section of the further stages is connected with at least one baseband processing unit in any preceding stage, such that the baseband processing sections are multistage-connected to the first stage of the baseband processing sections (*see figure 2, page 1 paragraph 0010, page 2 paragraph 0013 and 0014* where Blanke discloses baseband processing section that are further connected to other baseband processing sections. Blanke also discloses that computing capacity is equalized between the computing elements of

several base units of the same or different baseband boards. In order for this to occur the baseband processor section must be connected to preceding baseband processing units in the preceding stages)

Blanke however, does not specifically disclose that each baseband processing section comprises adding means, dropping means, and/or routing means for extraction and injection of baseband data streams and, respectively routing the data streams through the stages. In the related art Andersson discloses baseband processing section comprises adding means, dropping means, and/or routing means for extraction and injection of baseband data streams and, respectively routing the data streams through the stages (*see column 5 lines 20-30, column 7 lines 18-20* where Andersoon discloses allocated resources uplink and downlink processing)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Blanke by enabling flexing allocation of uplink and downlink processing as disclosed by Andersson to accommodate asymmetrical services (*see column 5 lines 20-30)*

Consider **claim 8**, Blanke discloses a baseband processing section for use in a mobile communication base station apparatus, said baseband processing section comprising an interface for user data streams (abstract), wherein said baseband processing section comprises a baseband-processing-section-to-baseband processing section interface for data streams transmitted and/or received between the baseband processing section and one other baseband processing section (*see figure 2, page 1 paragraph 0010, page 2 paragraph 0013 and 0014*

where Blanke discloses baseband processing section that are further connected to other baseband processing sections)

Blanke however does not specifically disclose adding means for injecting additional data streams to received data stream, dropping means for extracting data streams from received data streams, and routing means for passing resulting data streams over said baseband-processing-section-to-baseband processing section interface. In the related art Andersson discloses baseband processing section comprises adding means, dropping means, and/or routing means for extraction and injection of baseband data streams and, respectively routing the data streams through the stages (*see column 5 lines 20-30, column 7 lines 18-20* where Andersson discloses allocated resources uplink and downlink processing)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Blanke by enabling flexing allocation of uplink and downlink processing as disclosed by Andersson to accommodate asymmetrical services (*see column 5 lines 20-30)*

Consider **claim 2** and **9** and as applied to claim 1 and 8 above, Blanke as modified by Andersson disclose that the base station is a W-CDMA NODE-B System and the adding and dropping means control the spreading and de-spreading according to code division multiple access (*Blanke figures 1 and 2, abstract page 2 paragraph 0029) (Andersson column 4 lines 37-46, column 5 lines 44-63*)

Consider **claim 3** and as applied to claim 1 above, Blanke as modified by Andersson discloses that the transmission and/or reception sections are decomposed into receiver modules and transmitter modules (*Andersson figure 1*).

Consider **claim 4** and as applied to claim 1 above, Blanke as modified by Andersson disclose that the baseband processing sections within one stage are interconnected (Blanke *see figure 2, page 2 paragraph 001, page 3 paragraph 0028)*

Consider **claim 5** and as applied to claim 1 above, Blanke as modified by Andersson disclose that the stage configuration is a matrix configuration and the number of baseband processing sections in the stages of the baseband processing sections is constant ((Blanke *see figure 2, page 2 paragraph 001, page 3 paragraph 0028* note the load on the baseband processing unit is equalized among the existing processing sections)

Consider **claim 6** and as applied to claim 1 above, Blanke as modified by Andersson disclose that the routing means support load balancing on said interfaces by using corresponding interface connections *(Blanke page 2 paragraph 0016).*

Consider **claim 7** and as applied to claim 1 above, Blanke as modified by Andersson disclose that the apparatus comprises detection means for detecting defect baseband processing sections and said routing means supports fault tolerance by using routing paths avoiding said defect baseband processing sections (*Blanke page 2 paragraph 0017*).

Consider **claim 10** and as applied to claim 8 above, Blanke as modified by Andersson disclose that baseband processing section comprises baseband-processing-section-to-transmission-and/or-reception-sections-interface for data streams transmitted and/or received between the baseband processing section and transmission and/or reception sections (*Blanke figure 1 and 2)* (*Andersson figure 1*).

Conclusion

4. Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

5. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ibrahim A. Khan whose telephone number is (571) 270-1110. The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Ibrahim A. Khan
I.A.K./iak

03/02/2007